



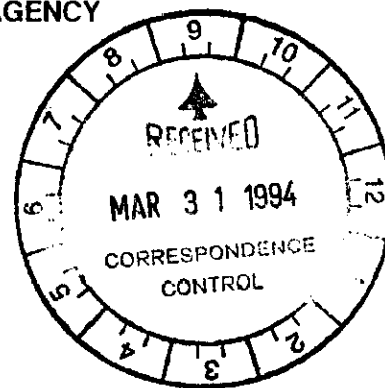
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UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION 10 HANFORD PROJECT OFFICE
712 SWIFT BOULEVARD, SUITE 5
RICHLAND, WASHINGTON 99352

March 3, 1994



Paul M. Pak
U.S. Department of Energy
P.O. Box 550, A5-19
Richland, Washington 99352

Re: 200-ZP-1 Operable Unit Interim Remedial Measures Proposed
Plan Comments

Dear Mr. Pak:

The U.S. Environmental Protection Agency (EPA) has completed its review of the 200-ZP-1 Operable Unit Interim Remedial Measures (IRM) proposed plan. Specific comments are enclosed.

The EPA has a general concern with the proposed plan as it is written. The plan is extremely complicated and confusing. Some of the information in the proposed plan is information that is usually contained in remedial design reports. This proposed plan also appears to be written for a treatability test rather than a full-scale pump and treat operation.

The other major concern with this proposed plan is that it ignores the Applicable or Relevant and Appropriate Requirements (ARARs) required in the CERCLA statute. The Aggregate Area Management Study Report (AAMS) for the 200 West groundwater identified general ARARs for the 200 West groundwater. However, no where has the U.S. Department of Energy (DOE) refined this list as it pertains to the IRM proposed for 200-ZP-1. This information can be contained in an engineering support document and should be included in the Administrative Record for 200-ZP-1.

As stated earlier, Attachment 1 contains specific comments and recommendations from EPA regarding the 200-ZP-1 proposed plan. Attachment 2 shows an example of how to present the nine evaluation criteria in a proposed plan.

The EPA requests that DOE submit an informal copy of the rewritten proposed plan to the Washington State Department of Ecology (Ecology) and EPA by March 9, 1994 for their review.



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Paul Pak

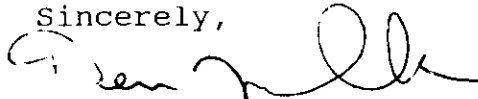
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March 3, 1994

The EPA proposes to meet with DOE the week of March 14 to discuss any further changes that may be required in the plan. It is EPA's intention to send the 200-ZP-1 IRM proposed plan to public comment no later than April 18, 1994.

If you have any questions or concerns, please call me at (509) 376-8631.

Sincerely,



Dennis A. Faulk
Operable Unit Manager

Enclosure

cc: **Becky Austin**, WHC
Dib Goswami, Ecology
Danny Parker, WHC
Administrative Record (200-ZP-1 Operable Unit)

ATTACHMENT 1

Comment: Introduction, page 1-3

The introduction to be proposed plan is confusing.
Clarification is needed for:

- describing the function and content of the AAMS Report, (i.e., similar to an RI/FS Phase 1 and 2 Report).
- failure to describe what the risks are from carbon tetrachloride, chloroform, and trichlorethylene, (i.e., suspected human carcinogens).
- paragraph on IRM activities proposed for 200-ZP-1 should be rewritten to clarify that the three activities proposed are part of the remedial design phase of the IRM.
- EPA recommends removing "How to Participate" section on page 2 and including this information as part of the introduction.
 - Add information repository locations after Administrative Record discussion.

Comment: Location and History, Page 3

- change title to "Site Background".
- add discussion concerning carbon tetrachloride in vadose zone and action being taken to mitigate problem, (i.e., link carbon tetrachloride vapor extraction to ZP-1 work).
- provide scale on Figure 2. Link discussion under site background to Figure 2.

Comment: Page 6

- Remove section titled "Activities Leading to Interim Remedial Measures".

Comment: Scope and Role of Response Action

- change title to "Summary of Site Risks."
- detail why action is required.
- discuss major risks posed by carbon tetrachloride, trichlorethylene, and chloroform.
- link discussion to Figure 2.

Comment: Page 7

Remove the entire section titled "Summary of Evaluation of Alternatives" and replace the section with the title "Need for Remedial Action." Include discussion of Remedial Action Objectives.

Comment: Page 8

- Rewrite this section to address only two alternatives.
 1. No Action
 2. Pump and treat option. Include IRM scale up assumption and cost information.

Comment: Evaluation Against the Seven Criteria, page 9

The evaluation is actually against nine criteria. EPA has attached an example of how to place the nine criteria in the proposed plan (see Attachment 2). Using the example in Attachment 2 will provide for easier reading of the proposed plan.

Comment: Page 10

- Add title "Comparative Analysis of Alternatives".
- Compare only the No Action versus Pump and Treat.
- Expand discussion on ARARs. Identify major ARARs, (i.e., DWS, MCL of 5 ppb for carbon tetrachloride) identify location of refined list of ARARs, (i.e., engineering support document).

Comment: Preferred Alternative, page 8

- Move this section to follow "Analysis of Alternatives".
- Explain why this is the preferred alternative. Briefly describe what the treatment system will consist of and other activities which will occur during the remedial design phase.

Table 4
EPA's Nine Evaluation Criteria

1. **Overall Protection of Human Health and the Environment** - Does the alternative achieve adequate overall elimination, reduction, or control of risks to human health and the environment posed by each pathway? This is a summary check that takes into account the other criteria and includes an evaluation of short-term and cross-media impacts.
2. **Compliance with Federal and State Regulations** - Does the alternative meet all of the applicable or relevant and appropriate requirements (ARARs) that have been identified? These are typically established environmental standards, but other, nonenvironmental standards may also be ARARs for a particular alternative.
3. **Long-Term Effectiveness and Permanence** - Does the alternative leave a risk after the conclusion of remedial activities?
4. **Reduction of Toxicity, Mobility, or Volume Through Treatment** - Does the alternative permanently and significantly reduce the hazard posed by the site by destroying contaminants, reducing the quantity of contaminants, or irreversibly reducing the mobility of the contaminants?
5. **Short-Term Effectiveness** - Does the alternative provide adequate protection to human health and the environment during the remedial action, and how long does it take for the action to achieve the established objectives?
6. **Implementability** - Is the alternative technically and administratively feasible?
7. **Cost** - What are the overall capital cost and operations and maintenance costs associated with the alternative?
8. **State Acceptance** - Does the alternative address the technical and administrative concerns of the state?
9. **Community Acceptance** - Does the alternative adequately address the concerns of the local community?

...of soil at the site following remediation. These alternatives are not considered effective in mitigating risks from the areas. Alternative 1 is not considered effective in creating a barrier to exposure, the soil cover over contaminated soil, but because the cover could be easily disturbed, it is not considered a permanent remedy. Alternatives 4 and 5 are both effective and permanent. In both of these alternatives, contaminated soil is removed from the location where possible exposure could occur to a location designated for waste disposal.

4. Reduction of Toxicity, Mobility, or Volume through Treatment

Alternatives 1 and 2 do not reduce the contamination; therefore, this criterion is not met for these alternatives. There is also no reduction of toxicity or volume in Alternatives 3, 4, and 5. Alternatives 4 and 5 reduce the mobility of the contamination. However, Alternative 4 uses treatment to accomplish the mobility reduction.

5. Short-Term Effectiveness

There are two basic considerations when evaluating alternatives against this criteria: (1) does the alternative create human health or environmental concerns?